MONERATOR®

Power Station

by Lithium

USER MANUAL

Gusto10 Gusto20 Gusto40

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CONTENTS of Packing

Name of Item	Quantity	View
Gusto Power Station (battery included)	1	

Standard Accessory Items List

Name of Accessory Item	Quantity	View
AC Wall Charger	1	
USB Connection Set	1	
External Fuse	2	
DC-AC Power Inverter(External)	1	
User Manual	1	
Optional accessory list(Optional accessory is not included in the standard package)		
Solar Panel		
Connection Cable		
LED Lamp		
LED Lamp Holder		

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Gusto Power Station User Maintenance Chart

To get the best performance from the battery, please charge Gusto Power Station regularly.

- **For Long Time Storage,** please maintain 50%-80% charge stage and remove the external fuse and store in a cool place.
- **Never Stock Gusto Power Station when internal battery in low capacity level.**
- **Recommend to give regular maintenance every 3-4 months.**

**Battery maintenance means to charge and discharge battery and maintain 50%-80% charge stage before storage.*

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WARNING

To reduce fire or shock hazard, do not expose the unit to rain or moisture.

IMPORTANT SAFETY INSTRUCTIONS

-SAVE THESE INSTRUCTIONS

-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS

If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.

Notice before using

In order to safety and correctly use this product, please read the following before using.

If an error occurs as following scenario(but not limited to), please stop using the product IMMEDIATELY, and turn OFF the power switch.

- Gusto Power Station, charger, connecting cord, or plug abnormally hot, if the burnt odor was.
- Liquid intrusion. If the liquid such as water has entered the Power Station's body inside.
- If the foreign matter such as metal gets inside.
- If dropped or, it has been damaged.

Danger

- Do not use in connection with life support systems or other medical equipment or devices.
- Do not disassemble or modify Gusto Power Station.
- Do not short-circuit. Please do not insert metal objects(such as hairpins, nails, etc.) to any output ports (such as USB output port, cigarette-lighter output port of this product, etc.) and input port (such as charge input port, etc.). It may lead to heat, fire, and the cause of the rupture.
- Do not drop in fire, do not overheat.
- Do not expose this product to direct sun.
- Do not put it within children's reach.
- Do not keep near-side and under the hot sun, stove fire, use, such as in a car that is hot, in a hot place.
- Do not expose the product to moisture, rain, snow, spray, contaminated water and dusted circumstances.
- When connecting terminal "+" & "-" to solar panel, please do not short-circuit the side of terminals, there may be sparks.
- To avoid damage to the product, do not connect the output terminal to any other AC power line, including (but not limited to): commercial power, generator, linear power and inverter.

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- Do not touch the DC output port and USB output port with wet hands. There is a risk of electrical shock.
- Insert the plug completely up to the base solar panels for cord plug. Failure to do so may result in fire due to the heat generation or electric shock if the plug is incomplete.
- Do not use Gusto Power Station if the unit is visibly leaking liquid.

Battery Safety Warning

Gusto Power Station has built-in battery with latest Lithium-ion battery technology. If the battery pack is mishandled, the battery pack can hurts, cause a fire or even chemical burns. Observe the following cautions.

- DO NOT disassemble Gusto Power Station
- DO NOT disassemble the battery inside the Gusto Power Station
- DO NOT crush and do not expose the battery pack to any shock or force such as hammering, puncturing, dropping or stepping on it.
- DO NOT handle damaged or leaking lithium ion battery.
- Keep the battery pack out of the reach of small children.
- Keep the battery pack dry.
- Replace only with the same or equivalent type recommended by manufacturer.

Note

- Dust is not accumulated in the outlet between the solar panel and outlet of the charging adapter input and outlet, please perform the inspection regularly. Failure to do so may result in heat generation or fire. It is therefore important that you make sure Gusto Power Station is maintained in good condition by simple checks every time you use it, by regular inspections and also by using it in a sensible way.

- If you want to charge with this product, we recommend to charge at 32°F to 113°F (0°C to 45°C), if not, you may not be able to fully express the performance of the battery.

Caution

Unauthorized changes or modifications to the equipment WILL void the manufacturer's warranty.

AC Adaptor

Use the nearby wall outlet (wall socket) when using the AC Adaptor. Disconnect the AC Adaptor from the wall outlet (wall socket) immediately if any malfunction occurs while using the apparatus.

The power cord (main lead), if supplied, is designed specifically for use with Gusto Power Station only, and should not be used with other electrical equipment.

RECYCLING Lithium-ion Batteries (For Customers in the USA and Canada)

Lithium-ion batteries are recyclable. You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.

For more information regarding recycling of rechargeable batteries, visit http://www.rbrc.org/

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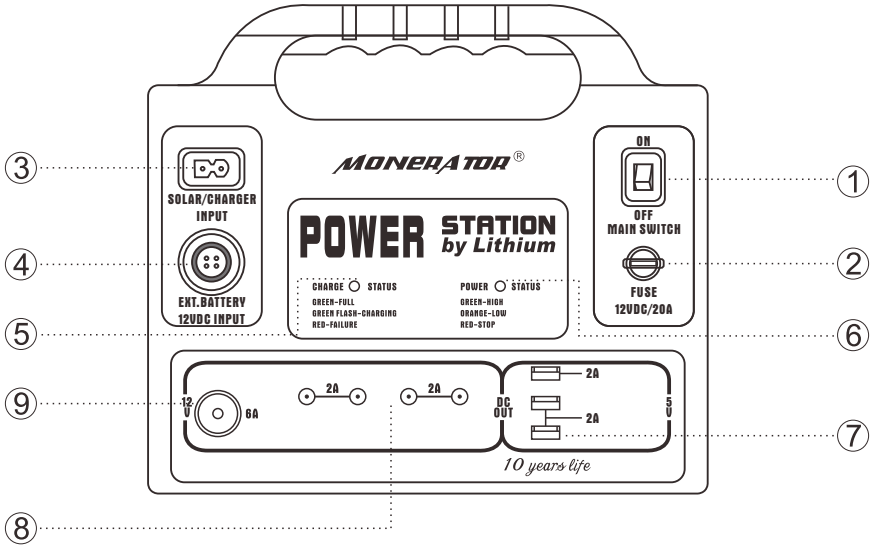
Gusto Power Station Overview



Serial Number	Name of the parts	Ratings			Remarks
1	Main Switch	Gusto 10	Gusto 20	Gusto 40	
		128Wh	256Wh	512Wh	
2	External Fuse	12.0Vdc/20A			
3	Charge Input Port *For both charger and solar panel	14.6~25Vdc, 3A			
4	External Battery Input Port	12V battery only			Please consulate for right power extension
5	LED 1 Charge Indicator	See page 10			
6	LED 2 Battery Power Level Indicator	See page 10			
7	3*USB Output Port	5V, max.2A power varied			See markings on the Power Station
8	4*12V DC Power Jack Output Port	12V, max.2A each			
9	12V DC Car Cigarette-lighter Output Port	12V, max.6A			

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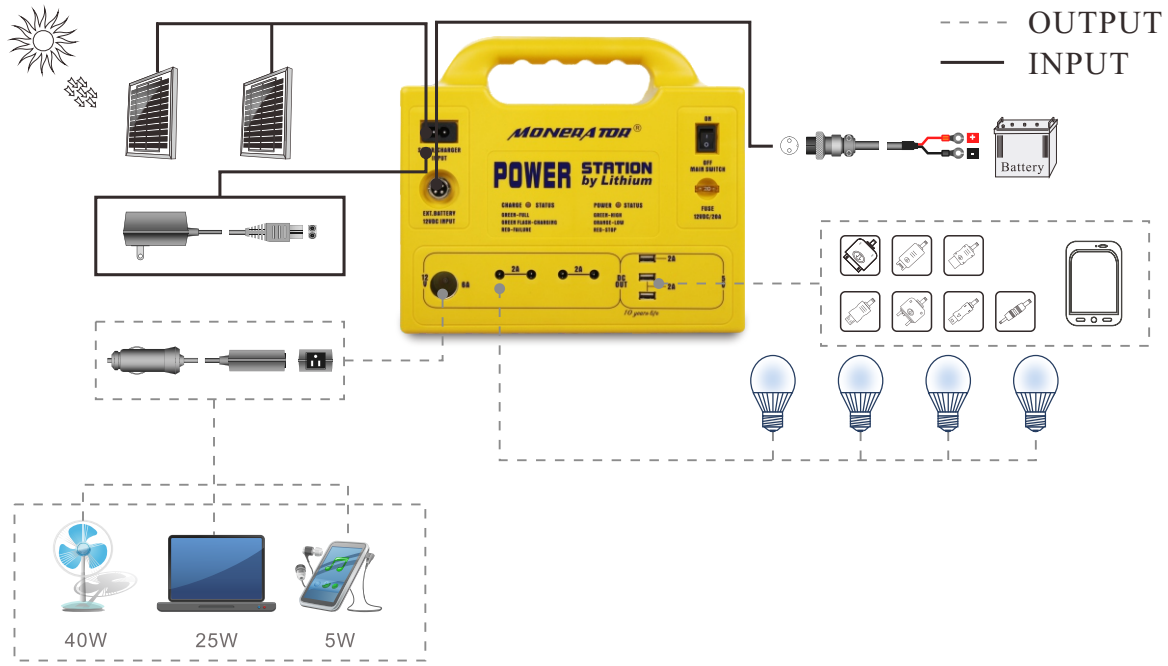
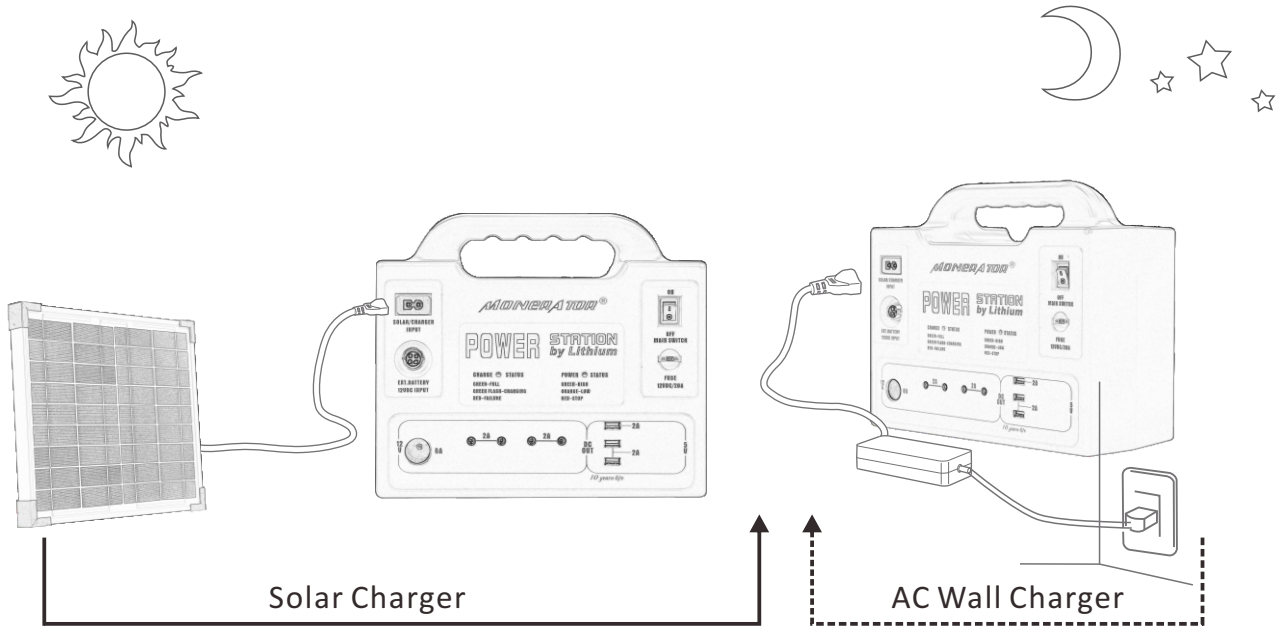
To Operate Gusto Power Station



To Charge a Gusto Power Station



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Main Specifications

Product Features			
Product Name	POWER STATION (Gusto Series)		
Rated Power	Please refer to the label on the back of the Power Station		
Build-in Battery	Yes		
Build-in Battery Type and Power:	Lithium-ion - Lithium Iron Phosphate Battery (Li-$FePO_4$), 12Vdc **Please find specific power rating located at the back of Gusto.*		
Life Span	Thousands of cycles		
Physical Dimension	285*134*248mm (11.2"*5.3"*9.8")		
Weight (battery incl.)	Gusto 10	Gusto 20	Gusto 40
	128Wh	256Wh	512Wh
	2.2KG(4.9lbs)	3.2KG(7.1lbs)	5.2KG(11.5lbs)
Waterproof	No		
Operation Temperature Range	32°F to 113°F (0°C to 45°C)		
Storage Temperature Range	-4°F to 140°F (-20°C to 60°C)		
Multi-level Safety Features			
Battery Management & Protection	Yes. Build-in.		
Short Circuit Protection	Yes		
Over Loading Protection	Yes		
Low Battery Capacity Warning	Yes		
Over Charge Protection	Yes		
Over Discharge Protection	Yes		
Fuse (user replaceable)	Yes. 12Vdc, 20A		
Power Output			
Max. Total Output of Power Station	140W or 14A		
DC Output			
Cigarette Lighter Port	1 outlet-12V 6A max.		
DC Power Jack Port	4 outlets-12V 2A max./each		
USB Port	3 outlets-5V 2A max. *Please find rates marked on Gusto.		
AC Output via External Inverter			
External Inverter	12Vdc to 220/110Vac		
Max Output Power	80W		
Charge Input (by charger and solar panel)			
Input Voltage Range	14.6V~25V		
Input max. Charging Current	4A		

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Solar Charge Controller	Included. Build-in
Max. Solar Input Power	17.4Vdc, 100W max.
External Battery Input	
Nominal Input Voltage Range	12Vdc
Nominal Capacity	Less than 100Ah

Charger

AC Wall Charger			
Charger Output Voltage	16.8Vdc		
Charger Output Current	3A		
Charger Input Voltage	100Vac~240Vac, 50/60Hz		
Charger Efficiency	80% approx.		
Charger Type	Specially designed for Li-ion ($Li\text{-}FePO_4$) battery		
Estimated Charging Time	Gusto 10	Gusto 20	Gusto 40
	*Max. 4 hours	*Max. 7 hours	*Max. 14 hours

*Please contact authorized dealer for more options of accessories.

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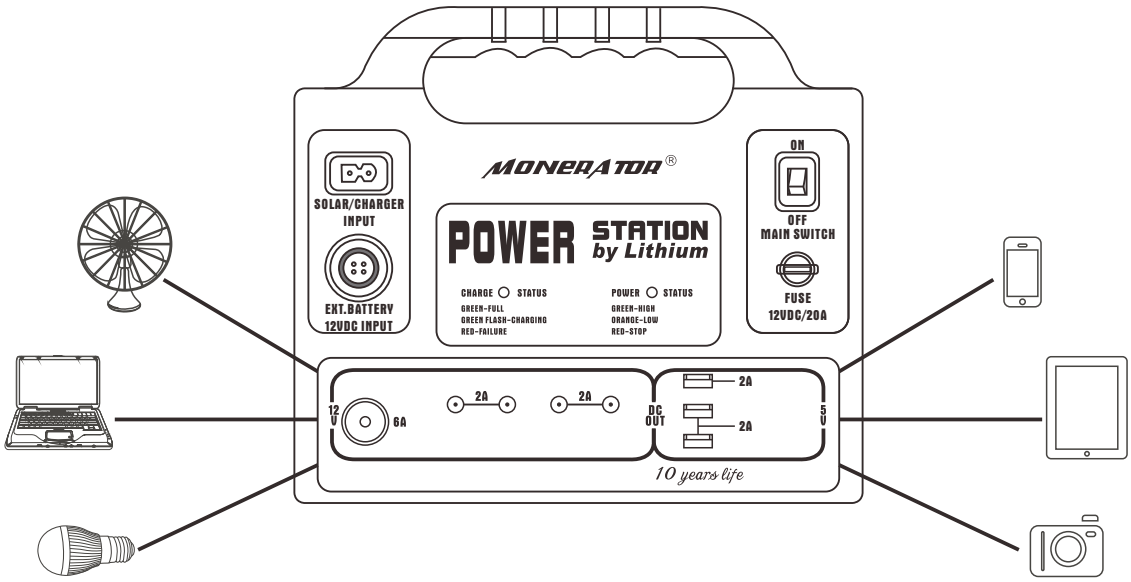
To Use Power Stored in Gusto Power Station



RUN TIME ON TYPICAL PRODUCTS

Applications	Watts	Runtimes Gusto 10	Runtimes Gusto 20	Runtimes Gusto 40
LED lamp	5W	24h	2Xs of Gusto 10	4Xs of Gusto 10
Laptop	25W	4h48minutes	2Xs of Gusto 10	4Xs of Gusto 10
Desktop computer	60W	2h	2Xs of Gusto 10	4Xs of Gusto 10
20" LCD monitor	50W	2h24minutes	2Xs of Gusto 10	4Xs of Gusto 10
Wireless modem/router	6W	20h	2Xs of Gusto 10	4Xs of Gusto 10
Printer	50W	2h24minutes	2Xs of Gusto 10	4Xs of Gusto 10
Cordless phone	5W	24h	2Xs of Gusto 10	4Xs of Gusto 10
20" LCD TV	75W	1h36minutes	2Xs of Gusto 10	4Xs of Gusto 10
Electric fan	40W	3h	2Xs of Gusto 10	4Xs of Gusto 10
Water heater	50W	2h24minutes	2Xs of Gusto 10	4Xs of Gusto 10

*From a fully charged Gusto Power Station.

*The above data are from simulated power consumption tests on a typical brand new sample unit at manufacturer's lab facilities. Differences may be found from product to product, or work at different conditions.

*The wattage (Watt) listed above chart for reference only.

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Charge Indicator: LED 1 (when a charger plug in)

LED 1 Status	Status of Charge
Green Lite:	Charging finish
Green Flashing:	Charging
Red Flashing:	False input charging voltage, or high input voltage warning.
Off:	1. The Main Switch is switched off. 2. No charger connected. 3. Charging error, such as bad connection between charger and Gusto. If charged by solar panel, indicates either the output voltage from solar power is too low or no power output from solar panel. 4. Gusto is at Sleep Mode[1]. 5. System error.

Battery Power Level Indicator: LED 2

LED 2 Status	Status of Capacity
Green Lite:	High capacity level. It is good to use.
Orange Lite:	Weak capacity level. Prepare to reduce the outputs or disconnect from all outputs and ready to charge.
Red Lite:	Low capacity level warning. Shall disconnect from all power outputs immediately and charge ASAP.
Red Flashing:	After 15 sec. flashing, Gusto automatically cuts off all outputs and switches to low voltage protection **Sleep Mode**[1] NEED Charging ASAP.
Off:	1. The Main Switch is switched off. 2. Gusto is at Sleep Mode[1]. 3. Power error, such as over loading or being idle for long. 4. System error.

[1]About **Sleep Mode:**

The Gusto will switch to “Sleep Mode” for the purpose of safety and energy saving. For example:

1). When Gusto doesn’t charge input or power output continuously for 30 min. It will initiate energy saving management by switching to “Sleep Mode”.

2). When internal battery is detected as low in capacity, Gusto will automatically cut off all outputs and switch to “Sleep Mode”.

When Gusto Power Station switches into **Sleep Mode**[1], to resume working, the Main Switch needs to be turned OFF and turned back ON once. (OFF/ON once).

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How to Use the Gusto Power Station

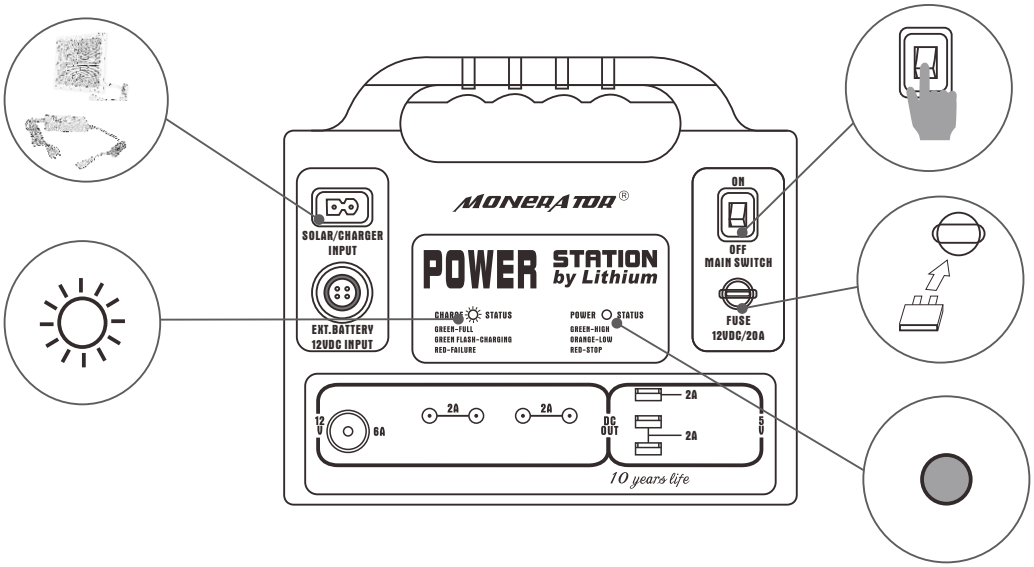
1 Get Started

Before operating following steps, make sure the Main Switch is at OFF position.

1. Make sure external fuse is plugged into the fuse socket. If not, install the fuse into the fuse socket.
2. Plug in AC Wall Charger or Solar Panel.
3. Switch on Gusto Power Station by pressing the Main Power Switch at ON position.
4. **Charge Indicator LED 1** flashes and **Battery Power Level Indicator LED 2** turns green. Want to get more information on the **Charge Indicator LED 1** and **Battery Power Level Indicator LED 2**, please see page 10.
5. Charge Gusto Power Station until the internal battery is fully charged.

Note:

- When installing fuse into Fuse Socket, there may be sparks.
- After initiating the system, please do not switch off the Main Switch or remove the fuse during the charging.
- When the internal the battery is fully charged, Gusto Power Station will stop charging automatically.



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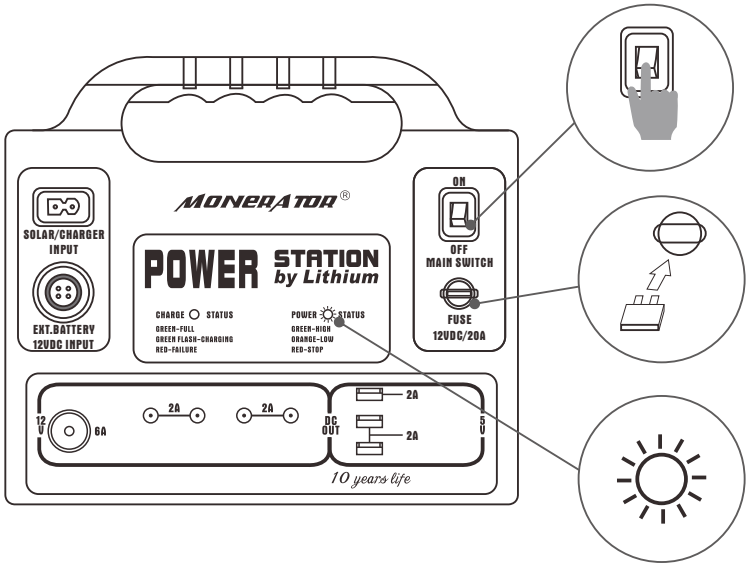
2 Let Gusto Power Station Turn On

Before operating following steps, make sure the Main Switch is at OFF position.

1. Make sure the fuse is installed into the fuse socket.

2. Press the Main Switch at ON position. Once the Battery Power Level Indicator LED 2 turns green, the device is turned on. Want to get more information on the Battery Power Level Indicator LED 2, please see page 10.



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3 Let Gusto Power Station Charge cell phone, camera, and more ....via USB cable

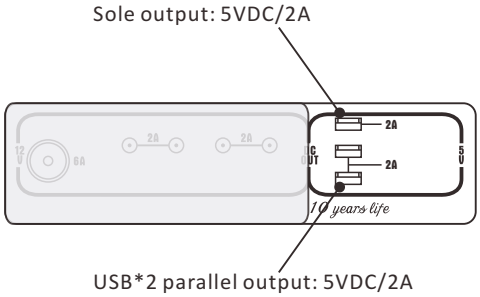
USB output port *3: 5VDC

- Support USB charging or load to use
- Sole output: 5VDC/2A

-Support apple iphone charging
-Other relatively high power devices

- USB*2 parallel output: 5VDC/2A

-General USB output, support USB charging or load to use



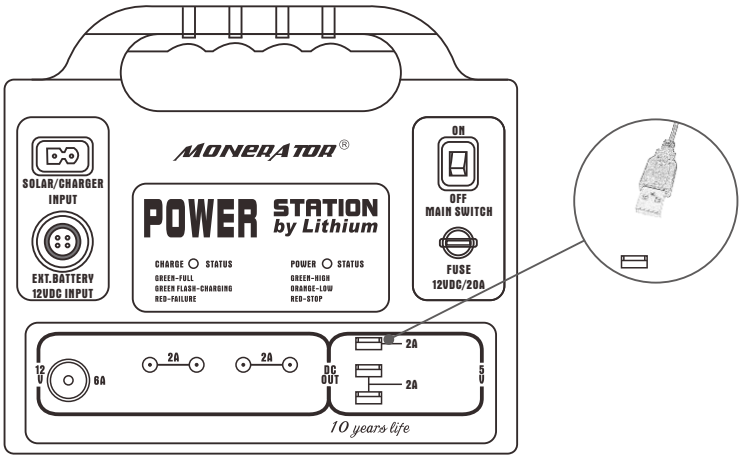
RECOMMEND: DO NOT TURN ON THE POWER OF BOTH GUSTO POWER STATION AND ELECTRONIC DEVICES BEFORE WIRING CONNECTION BETWEEN THE TWO.

1. Connect the electronic device, such as cellular phone, to the USB Output Port on Gusto Power Station, using the USB cable.
2. Follow steps in **2** to turn on Gusto Power Station.

Note:

***When the Main Switch is turned off, the Gusto Power Station will not provide any power, even when the device is connected to Gusto Power Station.**

*We do not guarantee operation with all electronic devices or models using USB cable connection.



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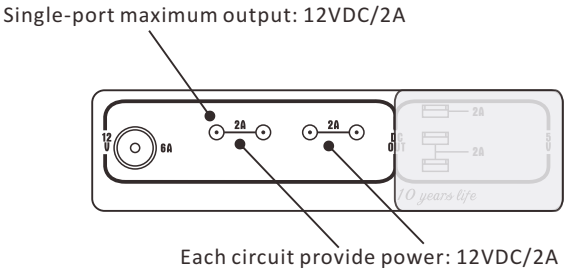
4 Let Gusto Power Station Power 12Vdc Lamp and 12Vdc devices ....via 12Vdc Port

DC Jack output*4: 12VDC

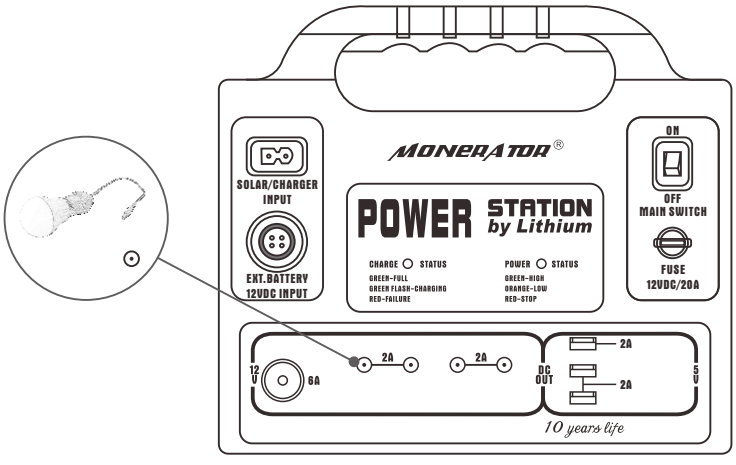
- Output divided into two loops, each circuit provide power 12VDC/2A
- Single port max. output 12VDC/2A
- General use as lighting, radio, fan, media etc. or a small device charge



RECOMMEND: DO NOT TURN ON THE POWER OF BOTH GUSTO POWER STATION AND ELECTRONIC DEVICES BEFORE WIRING CONNECTION BETWEEN THE TWO.

1. To light a 12V Lamp, screw LED Lamp Bulb into Lamp Holder. Connect Lamp Holder's cable terminal to 12V DC Jack Output Port on Gusto Power Station. Or if a device is connected with a car cigarette lighter terminal, plug it into Car Cigarette Lighter Port.

2. Follow steps in 2 to turn on Gusto Power Station.



Note:

***When the Main Switch is turned off, the Gusto Power Station will not provide any power, even when the device is connected to Gusto Power Station.**

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5 Let Gusto Power Station Give AC Power(100V~240V, max.80W)

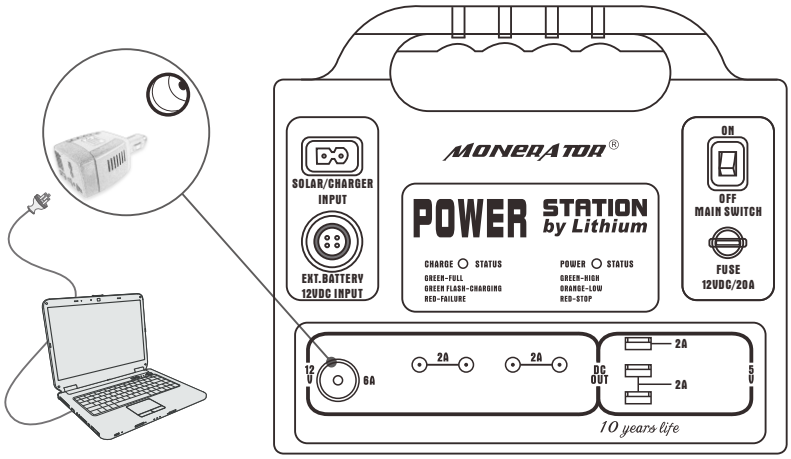
(Via 12Vdc Car Cigarette Lighter Port max. 80W)

RECOMMEND: DO NOT TURN ON POWER OF AC POWER DEVICES BEFORE THE WIRING CONNECTION TO GUSTO POWER STATION.

1. Plug External Inverter into the Car Cigarette Lighter Output Port on Gusto Power Station.

2. Follow steps in **2** to turn on Gusto Power Station.

3. Connect electronic device into the inverter. Then switch ON the power of the device. Gusto will operate most devices rated up to 80 watts.



Note:

***When the Main Switch is turned off, the Gusto Power Station will not provide any power, even when the device is connected to Gusto Power Station.**

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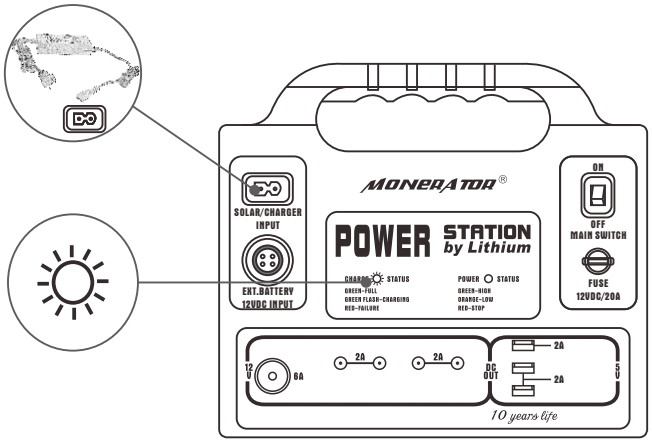
6 To Charge Gusto Power Station

RECOMMEND: DO NOT TURN ON POWER OF GUSTO BEFORE WIRING CONNECTION BETWEEN CHARGER AND GUSTO POWER STATION.

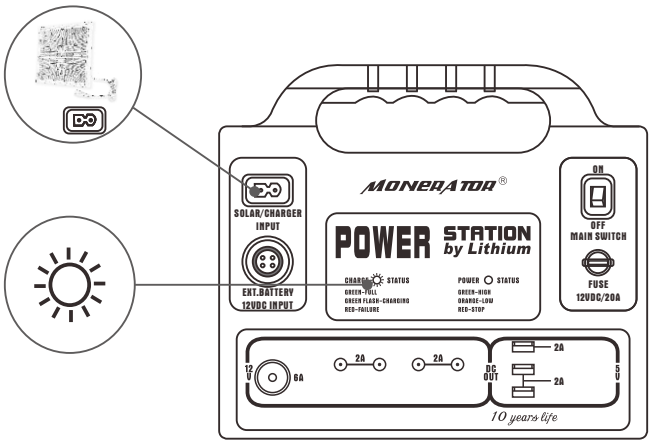
6.1) Use AC Wall Charger to Charge Gusto Power Station:

1. Plug AC Wall Charger into the Charge Input Port on Gusto Power Station.
2. Follow steps in 2 to turn on Gusto Power Station.
3. The Charge Indicator LED 1 is flashing. Want to get more information on Charge Indicator LED 1, please see page 10.



6.2) Use Solar Panel to Charge Gusto Power Station:

1. Plug cable terminal of the solar panel into the Charge Input Port on Gusto Power Station.
2. Follow steps in 2 to turn on Gusto Power Station.
3. The Charge Indicator LED 1 is flashing. Want to get more information on Charge Indicator LED 1, please see page 10.



Note:

***When the Main Switch is turned off, the Gusto Power Station will not provide any power, even when the device is connected to Gusto Power Station.**

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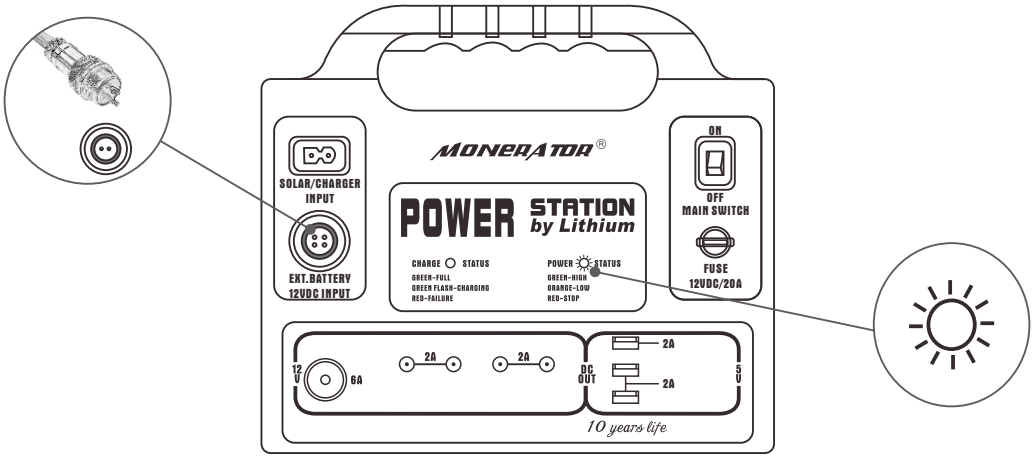
7 To Connect Gusto Power Station with an External Battery

RECOMMEND: DO NOT TURN ON POWER OF GUSTO BEFORE WIRING CONNECTION BETWEEN EXTERNAL BATTERY AND GUSTO POWER STATION.

1. Connect one end of External Battery Connection Cable with External battery's terminals.
2. Plug the other end of External Battery Connection Cable into External Battery Input Port on Gusto Power Station. Make sure to screw it tightly.
3. Follow steps in 2 to turn on Gusto Power Station.
4. Battery Level Indicator LED 2 will give quick blink for 5 times, indicating the two are connected. (If LED 2 at OFF status, indicating the connection failed.)
5. When the connection succeeded, the Gusto Power Station will manage the power between itself and external battery automatically.
6. Before disconnecting external battery from Gusto Power Station, Turn OFF the Main Switch of Gusto firstly.
   While doing wiring connection, be sure not to short-circuit "+" and "-" terminals of the external battery.

Note:

- Ratings of the external battery (allowed):
  - Nominal Voltage: 12Vdc
  - Nominal Capacity: less than 100Ah
- Wrong connection or false rating of the external battery may cause fatal failure or damage of the Gusto Power Station.



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Trouble Shooting:

If LED 1 is Light OFF (Charge Indicator)

✓ Please check Main Switch of Gusto Power Station, it needs to be switched on to allow any charge. ✓ Make sure the External Fuse in the right position with the right rating. ✓ Please check the specifications of the charging device. ✓ Please check the connection between the Power Station and charging unit. ✓ If charging with Solar Panel, please check the cable wiring connection. ✓ If the configuration of charging unit is correct, Gusto Power Station automatically starts charging. ✓ Make sure Gusto is not at Sleep Mode. ✓ To resume working, the Main Switch needs to be turned OFF and turned back ON once. (OFF/ON once).
If not, please contact our customer service team to get support.

If LED 2 is OFF (Battery Power Level Indicator)

✓ Please check Main Switch of Gusto Power Station, it needs to be switched on to work. ✓ Make sure the External Fuse in the right position with the right rating. ✓ Please check the battery is out of power. ✓ Make sure Gusto is not at Sleep Mode. ✓ To resume working, the Main Switch needs to be turned OFF and turned back ON once. (OFF/ON once).
If not, please contact our customer service team to get support.

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